//Code in JAVA

**public** **class** Assesment {

**public** **static** **void** main(String[] args) {

//Question 1 : Leader in the Array

**int** arr[] = {7,10,4,10,6,5,2};

**int** key =0;

**for**(**int** i=0;i<arr.length;i++) {

**if**(key<arr[i]) {

key=arr[i];

}

}

System.***out***.println(key);

//Question 2 :Best Time to Buy and Sell Stock

**int** prices [] = {7,10,5,3,6,4,1};

**int** small = prices[0];

**int** index=0;

**for**(**int** i=0;i<prices.length;i++) {

**if**(small>prices[i]) {

small=prices[i];

index=i;

}

}

**int** large = small;

**for**(**int** i=index;i<prices.length;i++) {

**if**(index==prices.length) {

System.***out***.println("0");

**return** ;

}

**if**(large<prices[i]) {

large = prices[i];

}

}

System.***out***.println(large-small);

//Question 3:Sum of All Subset XOR Totals

**int** nums[] = {5,1,6};

//total is the sum of the XOR operations of subsets of nums array

**int** total = 0;

**for**(**int** i=0;i<nums.length;i++) {

total+=nums[i];

**for**(**int** j=i+1;j<nums.length;j++) {

total+= nums[i]^nums[j];

}

}

System.***out***.println(total);

}

}